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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT:  
KOMANDORSKY ISLANDS REGION, 15 AUGUST 1975

K. J. Hill, et al

Teledyne Geotech

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23 December 1975

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**SPECIAL DATA COLLECTION SYSTEM EVENT REPORT**  
**Komandorsky Islands Region, 15 August 1975**

**K.J. Hill, M.S. Dawkins, and R.R. Baumstark**  
**Alexandria Laboratories**

**Teledyne Geotech, 314 Montgomery Street, Alexandria, Virginia 22314**

**December 1975**

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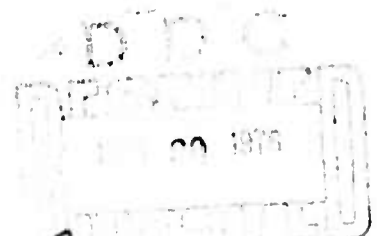
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20 ABSTRACT (Continue on reverse side if necessary and identify by block number)		

SDCS Event Report No. 42

Komandorsky Islands Region, 15 August 75

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Latitude	Longitude	$m_b$	$M_s$
NORSAR	07:38:47.7	07:28:23	55 N	168 E	5.7	N/A
Hagfors	07:38:50.5	07:28:13	53 N	161 E	5.9	6.7

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

07:28:17.6	54.5N	167.3E	5.7	6.7
------------	-------	--------	-----	-----

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR.

Long-period signals were recorded at WH2YK, CPSO, HN-ME, FN-WV, and LASA. At RK-ON the LP system was inoperative. The horizontal LP channels at HN-ME were not rotated because the LP transverse channel was inoperative. At CPSO the gain of the LP radial channel was unknown. Horizontal channels at WH2YK and FN-WV were not rotated due to signal clipping. NORSAR and ALPA long-period array data were not included because of program recovery problems.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short period.

# STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES		ELEVATION METERS	INSTRUMENTATION	
		DEG	MN SECS		SHORT-PERIOD	LONG-PERIOD
ALPA	Alaska	65 14	00.0 N 147 44 36.0 W	626	None	31300
CPSO	McMinnville, Tennessee	35 35	41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32	58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46 41	19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C E
HN-ME	Houlton, Maine	46 09	43.0 N 067 59 09.0 W	213	18300	SL210 V SL220 H
NORSAR	Kjeller, Norway	60 49	25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RK-ON	Red Lake, Ontario	50 50	20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41	41.0 N 134 58 02.0 W	853	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be  $316^{\circ} \pm 5^{\circ}$  based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

# HYPOCENTER DETERMINATION

INPUT FOR EVENT 15 AUG 75  
07:28:28.0 55.000N 167.000E 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST	REST	REST
WH2YK	07 34 32.4	0.0	-0.1	30.6	54.7
LAC	07 37 28.5	0.1	-0.0	52.1	60.5
FK-CN	07 37 51.0	-0.2	-0.1	55.2	49.7
NAO	07 38 47.7	-0.0	-0.1	63.5	347.4
HN-ME	07 39 25.6	-0.1	0.1	69.3	37.6
CPO	07 39 33.8	-0.5	-0.5	70.7	55.6
FN-WV	07 39 37.4	0.6	0.7	71.1	49.6

## 67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LCNG.	DEPTH (KM)	SDV	IT	STA
07:28:06.6	54.294N	167.086E	-61. CALC	0.3	7	7
07:28:17.6	54.536N	167.263E	0. REST	0.3	3	7

CALC				REST			
1 . 0				1 . 0			
0	.	5		0	.	5	
0	0. 0	1		0	0. 0	1	
.	.	.	.	.	.	.	.
0	0. 0	0		0	0. 0	0	
0	.	0		0	.	0	
0	.	0		0	.	0	

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 1.03  
MAJOR 160.4KM. MINOR 39.0KM. AZ= 15 AREA= 19672 SQ.KM. FIST

# DATA SUMMARY

INPUT FOR EVENT 15 AUG 75  
07:28:28.0 55.000N 167.000E 0KM.

STA.	PHASE	ARRIVAL		INST	PER	A/I	MAGNITUDE		DIR	DIST
		TIME					ME	MS		
WH2YK	EP	07 34 32.4		SPZ	0.9	115.	5.42			30.6
IAC M	EP	07 37 28.5		SAB	1.6	1941.	6.69			52.1
FK-CN	EP	07 37 51.0		SPZ	0.8	137.	5.64			55.2
NAC	EP	07 38 47.7		AE	1.4	453.	5.30			63.5
HN-ME	EP	07 39 25.6		SPZ	0.7	27.	5.10			69.3
HN-ME	LQ	08 06 32.0		LPR	21.0	9999.				
HN-ME	LR	08 13 18.0		LPZ	19.0	4855.		6.65		69.3
CPC	EP	07 39 33.8		SPZ	1.6	638.	6.40			70.7
FN-WV	EP	07 39 37.4		SPZ	0.7	45.	5.25			71.1

CRIGIN	IAT.	LCNG.	DEPTH (KM)	MAG	SDV	STA	LPMAG	LPSDV	LPSTA
07:28:06.6	54.294N	167.086E	0. CALC	5.69	0.56	6	6.65*****		1
07:28:17.6	54.536N	167.263E	0. REST	5.69	0.55	6	6.65*****		1

IAC NOT USED IN CALC RUN SP AVG. MAG.  
LAO NOT USED IN REST RUN SP AVG. MAG.

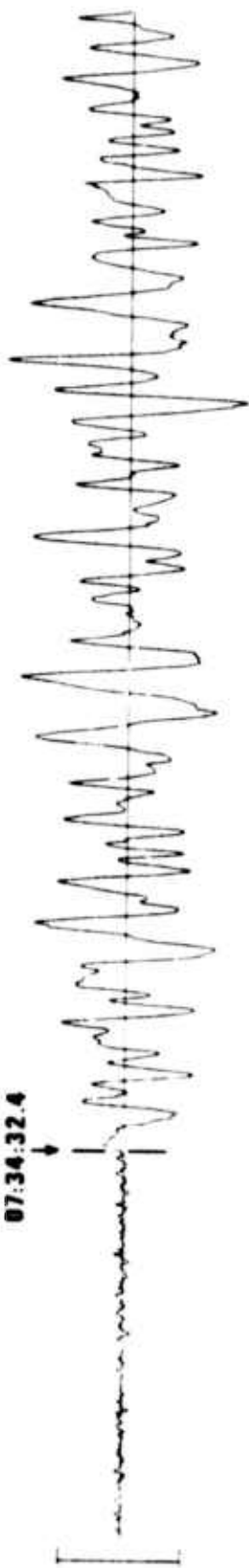
LAO NOT USED IN SP AVERAGE MAGNITUDE CALCULATION BECAUSE ITS MAGNITUDE EXCEEDED THE SDV PARAMETERS OF THE HYPOCENTER PROGRAM.



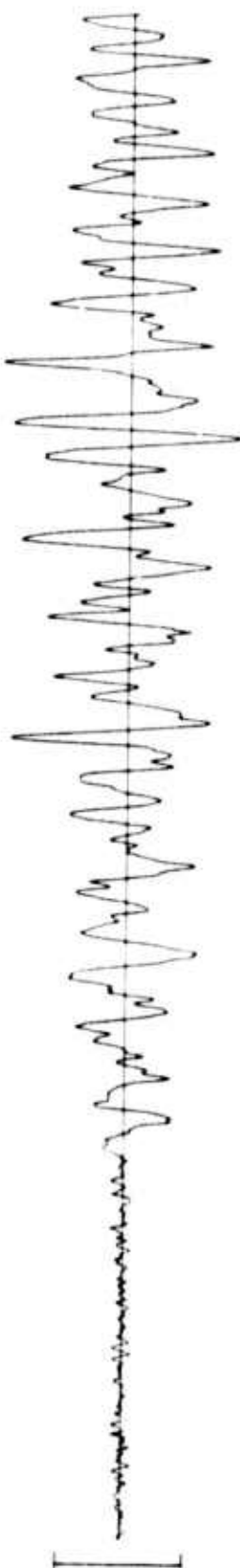
WH2YK 15 AUG 75

SPT  
125.69 Mμ

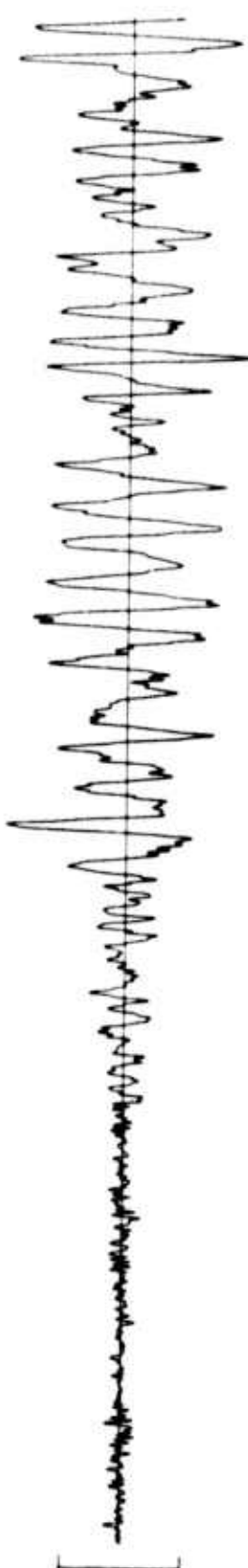
07:34:32.4



SPR  
86.95 Mμ



SPT  
75.89 Mμ



TIME



10 SEC

07:35:00

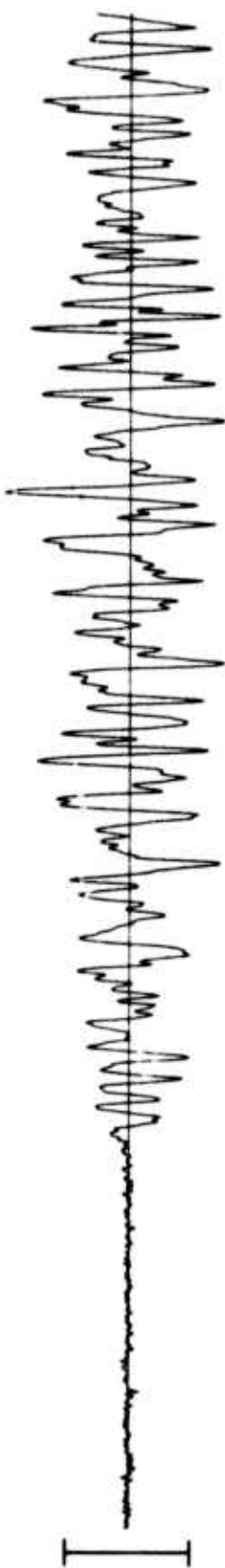
5<

RK-ON 15 AUG 75

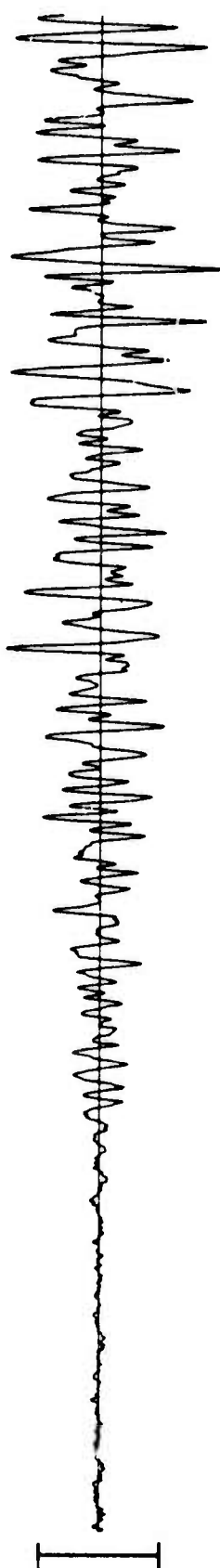
SPZ  
218.78 MHz



SPR  
113.12 MHz



SPT  
72.89 MHz



TIME



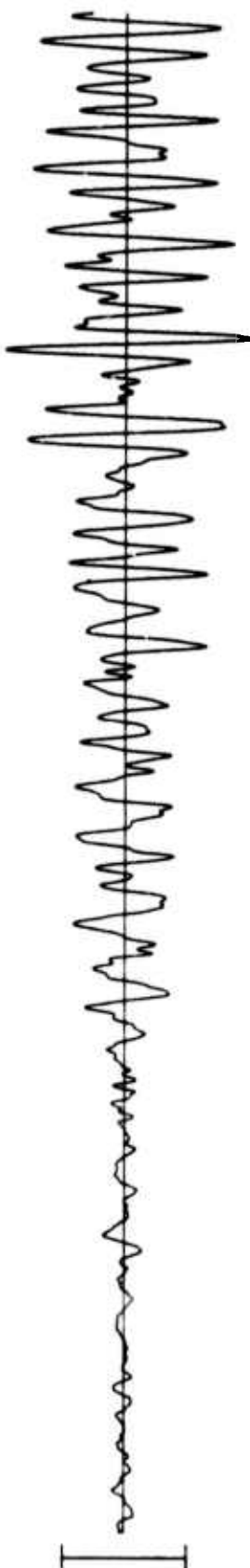
HN-ME 15 AUG 75

07:39:25.6

SPZ  
115.18 Mμ



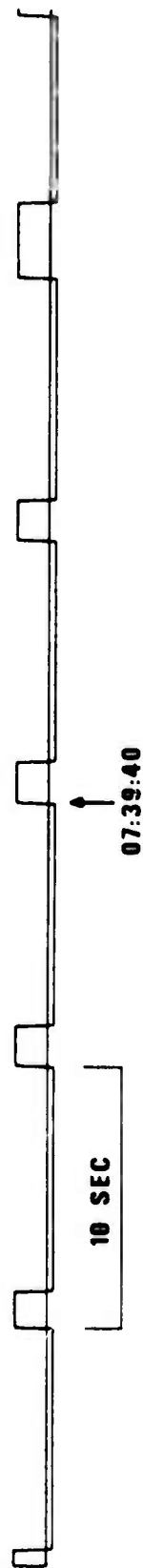
SPR  
40.97 Mμ



SPT  
35.43 Mμ

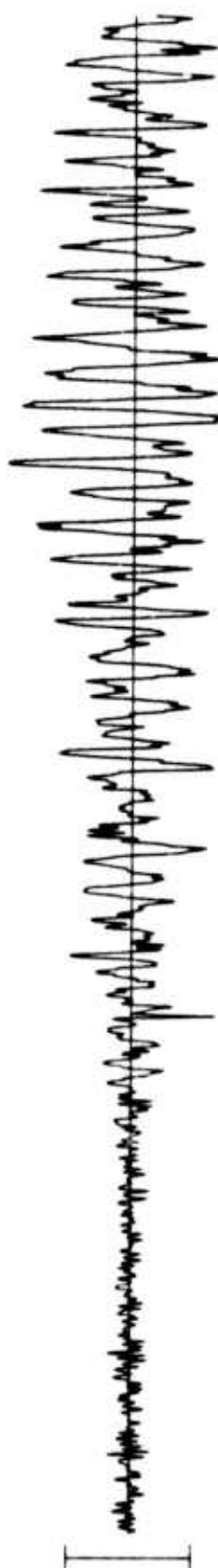
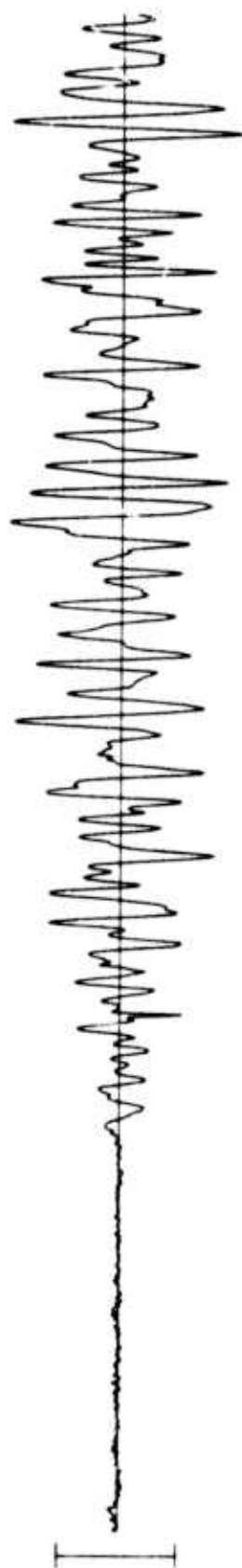


TIME



CPSO 15 AUG 75

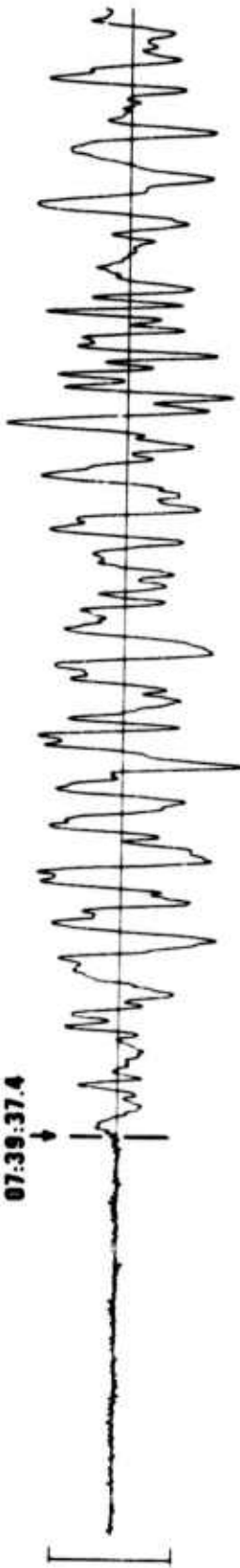
07:39:33.6



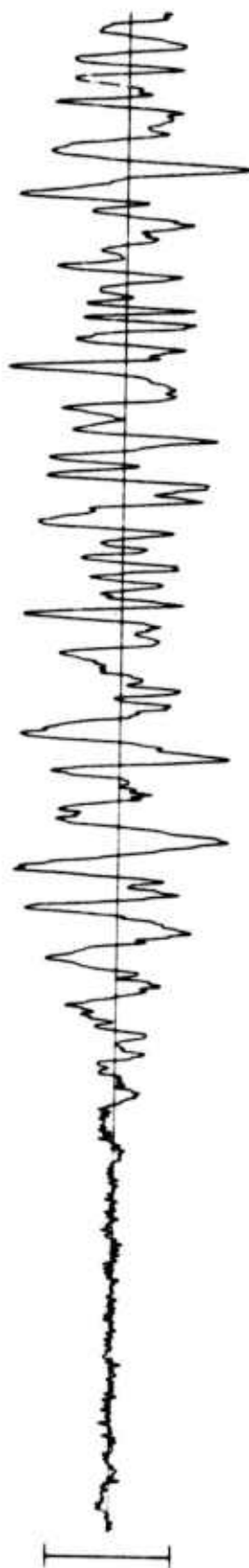
FN-WV 15 AUG 75

SPZ  
96.81 Mμ

07:39:37.4



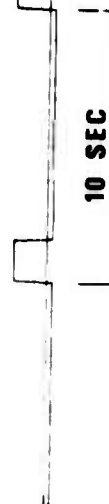
SPR  
54.89 Mμ



SPT  
38.52 Mμ



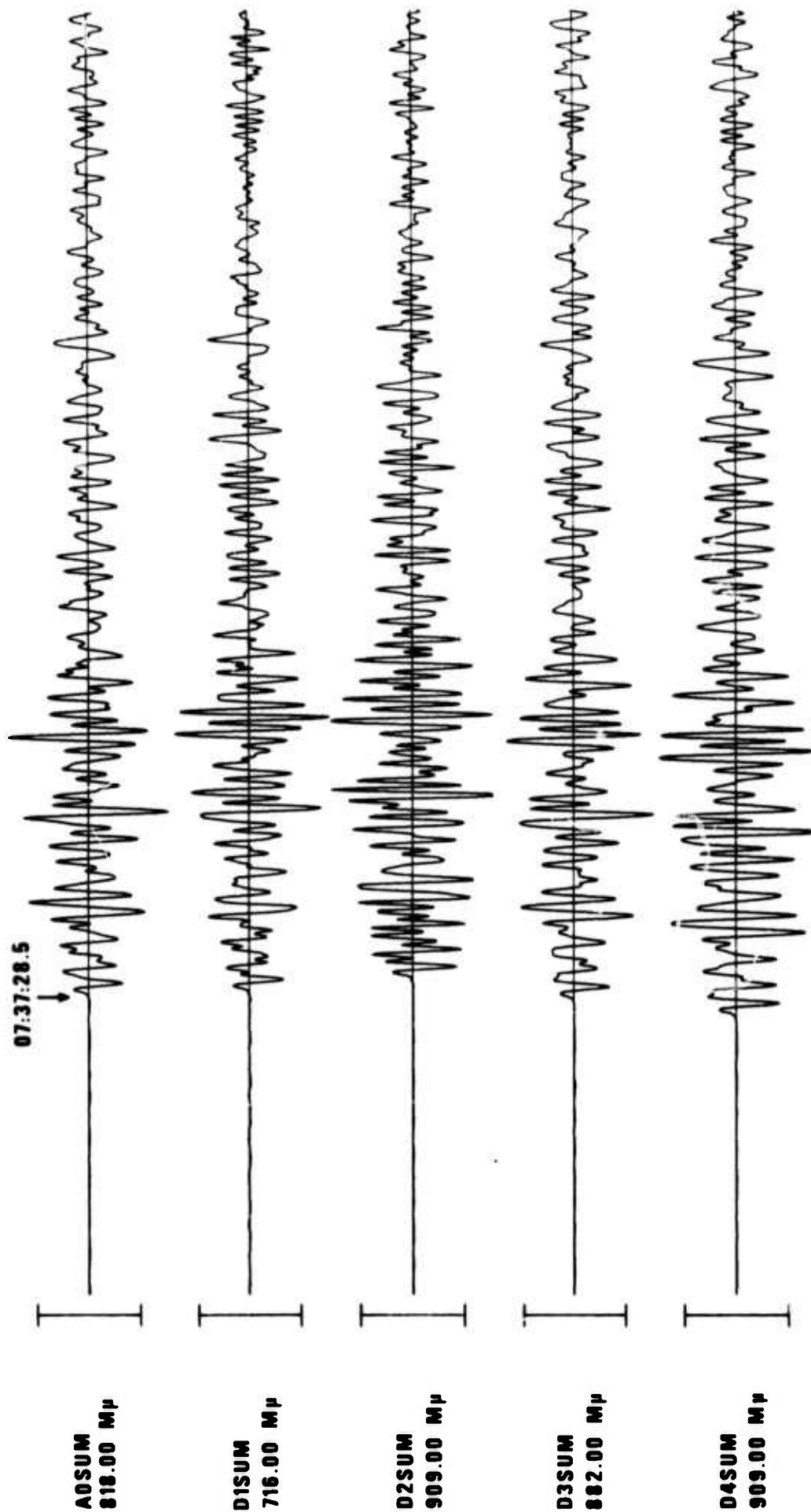
TIME



10 SEC

07:40:00

LASA INFINITE VELOCITY SUBARRAY SUMS 15 AUG 75



# NORSAR EVENT FILE

1975 AUG 15

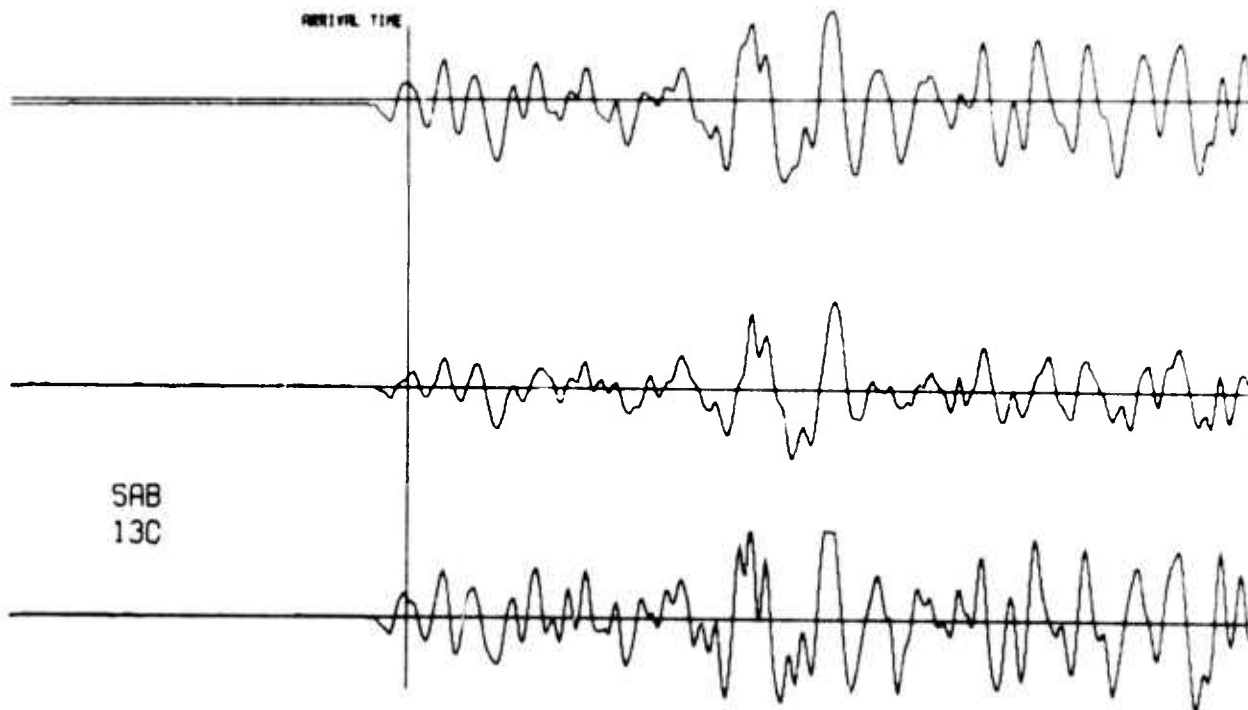
EPX NO. 14100 ARR. 7.38.48.9 54.7N 167.6E 5.7MB 33KM

DIST = 63.4 AZI = 14.8 AMP = 113.9 PER = 1.2

— = 5 SECONDS

AB

ARRIVAL TIME



HN-ME 15 AUG 75

08:13:18



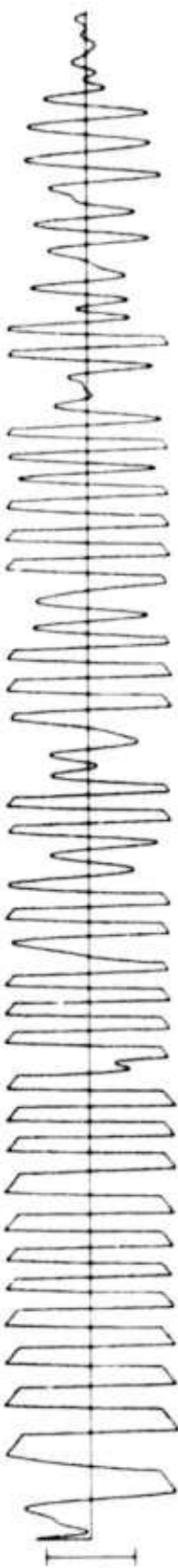


WH2YK 15 AUG 75

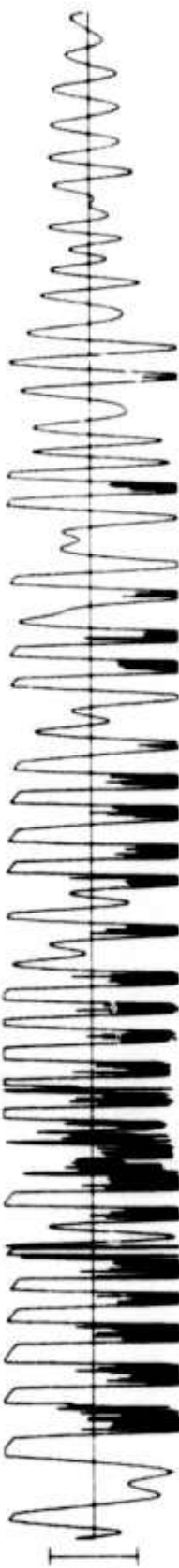
LPZ  
5438.16 MHz



LPR  
24274.76 MHz



LPT  
33784.15 MHz



TIME



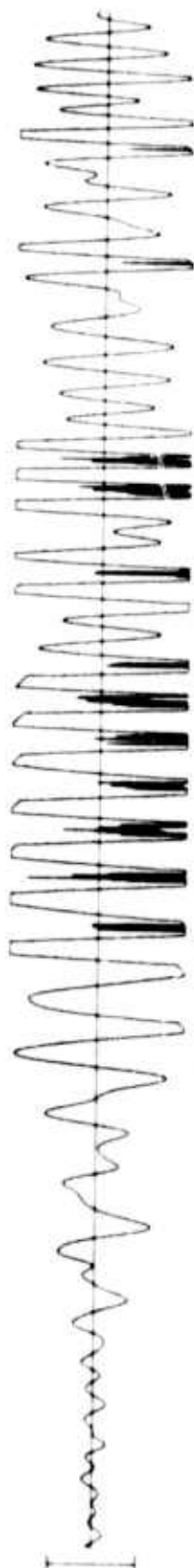
2 MIN

07:50:00

CPSO 15 AUG 75

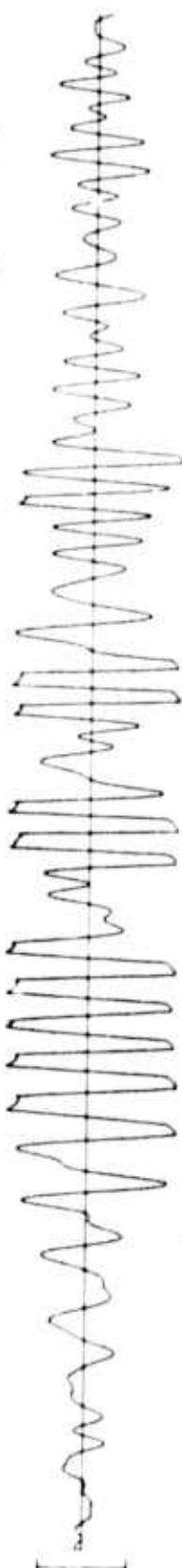
LPZ

20303.4C MHz



LPN

UNKNOWN



LPE

26256.25 MHz



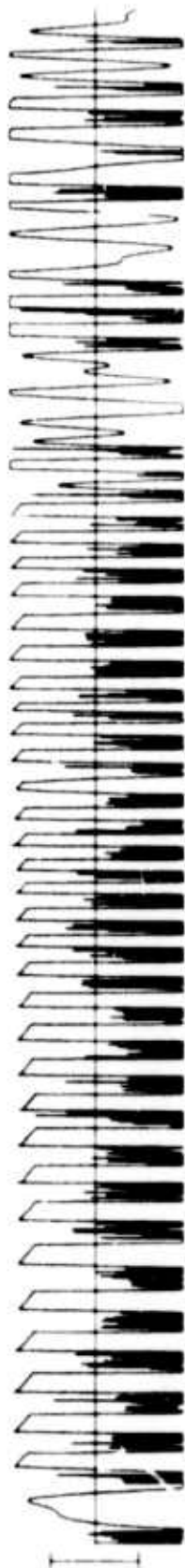
07:58:40

2 MIN

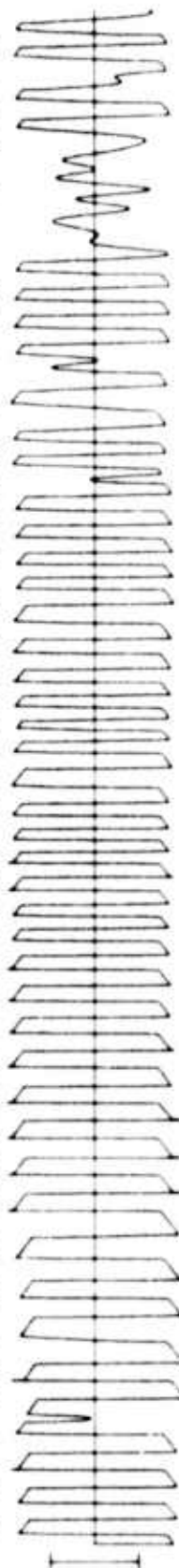
\*CALIBRATION INVALID

FN-WV 15 AUG 75

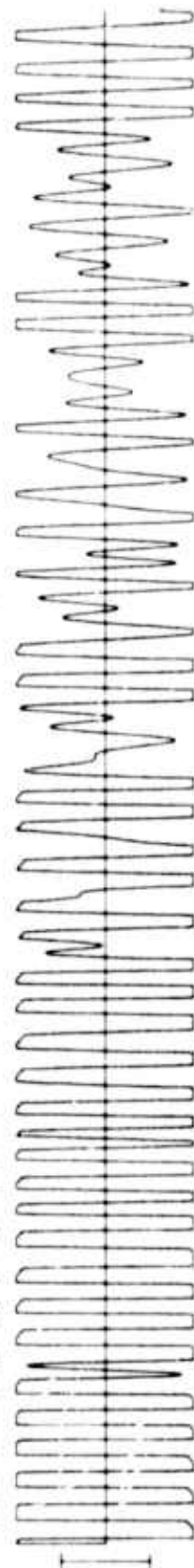
LPZ  
4760.64 MHz



LPR  
5084.00 MHz



LPT  
6533.31 MHz



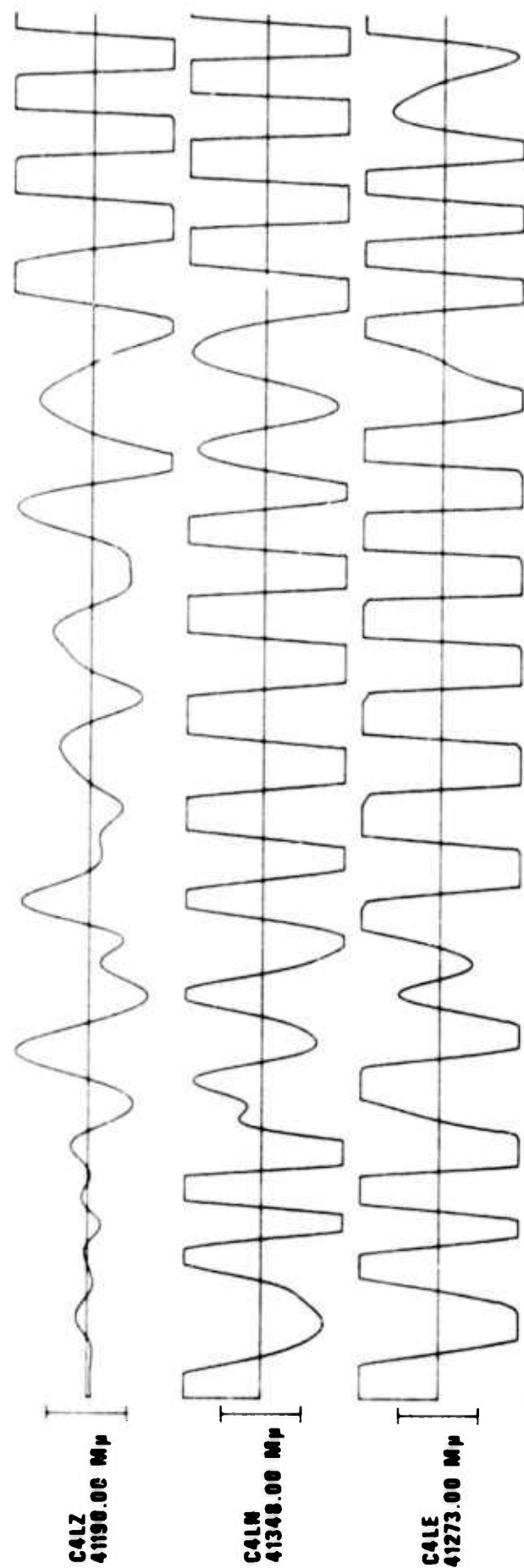
TIME



2 MIN

00:15:00

LASA LONG PERIOD C4 SUBARRAY 15 AUG 75



1 MIN